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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,166		04/27/2001	Mitchell Corner	P 280189 50684/USw	8587
909	7590	05/09/2002			
		HROP, LLP	EXAMINER		
P.O. BOX 10500 MCLEAN, VA 22102				MCAVOY, ELLEN M	
				ART UNIT	PAPER NUMBER
				1764	g
				DATE MAILED: 05/09/2002	•

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application N .	Applicant(s)				
		09/843,166	CORNER ET AL.				
i	Offic Action Summary	Examiner	Art Unit				
	•	Ellen M McAvoy	1764				
Th MAILING DATE of this communication appears n the cov r sh et with the correspondence address Peri df r Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status							
1)	Responsive to communication(s) filed	on <u>06 March 2002</u> .					
2a)⊠)☐ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-3,5-8,10 and 11</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.						
6)⊠	6)⊠ Claim(s) <u>1-3, 5-8, 10 and 11</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement. Application Papers							
9)[The specification is objected to by the E	Examiner.					
10)	The drawing(s) filed on is/are: a)	☐ accepted or b)☐ objected to by	y the Examiner.				
	Applicant may not request that any object	tion to the drawing(s) be held in abo	eyance. See 37 CFR 1.85(a).				
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 							
Attachment(s)							
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTC mation Disclosure Statement(s) (PTO-1449) Pape	0-948) 5) Notice	of Informal Patent Application (PTO-152)				

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGraw et al (4,851,144) and Ward et al (RE 33,658), considered separately, in combination with Smalheer et al.

Applicants' arguments filed 6 March 2002 have been fully considered but they are not persuasive. As set forth in the previous office action, McGraw et al ["McGraw"] disclose lubricant base oil compositions comprising a blend of glycols and esters useful for lubricating heat pumps and air conditioning compressors which comprise (A) about 95 to 5% by weight of a polyether polyol having a number average molecular weight from about 400 to about 5000 and having the formula

$$Z-[(CH_2-CH(R_1)-O-)_n-(CH_2-CH(CH_3)-O-)_m-R_2]_p$$

and (B) about 5 to 95% by weight of esters made from polyhydric alcohols with alkanoic acids or esters made from alkanedioic acids with alkanols. See column 2, lines 1-32. The examiner maintains the position that component (A) of McGraw meets the limitation of component (1) of applicants' claims when n is 0, R₂ is methyl and when Z is derived from methanol, ethanol, propanol and butanol as set forth in column 2, lines 51 to column 3, line 12. The examiner also maintains the position that component (B) of McGraw meets the limitation of component (2) of

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applicants' claims when component (2) is an ester selected from a polyol ester or an aliphatic diacid ester. Applicants argue that there is no disclosure or suggestion leading the practitioner to the selection of component (1) wherein n is 0, R2 is methyl and Z is derived from methanol, ethanol, propanol or butanol; and simultaneously, select component (2) from a polyol ester or an aliphatic diacid ester. This is not deemed to be persuasive since McGraw discloses and claims (in claims 2 and 9) a polyether polyol when n is 0. The R₂ substituent end-cap of the polyether polyol of McGraw may be hydrogen or an alkyl group of 1 to 6 carbon atoms which clearly meets the limitation of applicants invention of methyl (CH₃) for this substituent. Substituent Z in the compound of McGraw is clearly set forth in column 3, lines 4-11, wherein methanol, ethanol, propanol and butanol are specifically cited. Although McGraw does not teach the recognition of the ability of the glycol/ester blends to be resistant to formation of stable emulsions with water or the other advantages discussed in the response, the compositions of McGraw are suitable for use in air compression units which is indistinguishable from applicants' use of the compositions for air compressors. The examiner is of the position that the propeties discussed by applicants are inherent in the compositions of McGraw; that is, the properties were always present but went unrecognized. Discovery of inherent properties in known compositions, while beneficial, cannot result in the patentability of a known composition. As also previously set forth, McGraw allows for the addition of conventional additives to the composition such as antioxidants and corrosion inhibitors. See column 3, lines 35-39. Although antifoam additives are not cited by McGraw, the examiner maintains the position that it would have been obvious to have added any

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conventional lubricant additive to the composition such as antifoam agents. Smalheer et al is added to show that non-silicone containing antifoam agents are known in the art. See page 11.

As previously set forth, Ward et al ["Ward"] disclose synthetic lubricants comprising (A) about 15 to 45 weight % of an ester of a monohydric alcohol of 4 to 18 carbon atoms with one or more aromatic or alkane dicarboxylic acids having 4 to 18 carbon atoms, and (B) about 85 to 55 weight % of one or more polyether polyols having a number average molecular weight from about 400 to 5000 and having the formula

$$Z-[(R^1-O)_n-R^2]_m$$

wherein Z is the residue of a compound having 1-8 hydroxyl groups, R¹ is an alkylene radical having 2 to 4 carbon atoms, and R² is hydrogen or an alkyl group of 1 to 6 carbon atoms.

Suitable monohydric compounds for Z include methanol, ethanol, propanol and butanol. See column 2, lines 63-67. Applicants argue that one skilled in the art upon reading Ward would not have any knowledge or expectation that the specific combination disclosed and claimed herein has, unlike other combinations within the scope of the disclosure, but outside the range of subject matter being claimed herein, has the ability to resist formation of stable emulsions with water, hence, improved performance as a lubricating agent especially for use in air compressors. This is not deemed to be persuasive because, as discussed above, the beneficial properties discovered by applicants are seen to be inherent in the compositions disclosed and claimed by Ward. Ward also teaches that the compositions are used for air compressors. Ward also allows for the addition of conventional additives to the composition and "any such additives as may be required". See column 3, lines 25-31. Smalheer et al is added to show that non-silicone



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containing antifoam agents are known in the art. Thus, the examiner maintains the position that the synthetic lubricants of Ward also meet the limitations of the claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (703) 308-2510. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knode can be reached on (703) 308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Ellen M.McAvoy Primary Examiner Art Unit 1764

EMcAvoy May 7, 2002